

March 22, 2005

Mr. John Robertus, Executive Officer
California Regional Water Quality
Control Board, San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340

Dear Mr. Robertus:

SUBJECT: SAN ONOFRE NUCLEAR GENERATING STATION (SONGS)
RESPONSE TO SAN DIEGO BAY COUNCIL COMMENTS

We have reviewed San Diego Bay Council's (SDBC) letter dated March 8, 2005 submitting comments on the renewal of the SONGS Units 2/3 NPDES permits. We offer the following comments in response as well as information to assist the RWQCB in its response. We have followed SDBC's comment numbering convention for convenience. Footnotes to our comments reference various supportive studies, policies, reviews and other technical documents. Although all of these references should be located in the RWQCB's files, we can provide an additional copy if desired.

General Comments, Page 1

First, SDBC's assertion that "the environmental impacts to the marine ecosystem from SONGS are massive" is baseless and lacks any scientific merit. This statement parrots the prediction of interveners in the SONGS 2/3 licensing hearings during the early 1970s; a prediction which was later resoundingly disproved by the California Coastal Commission's (CCC) independent Marine Review Committee (MRC). Both the MRC¹ and Southern California Edison (SCE)² investigators studied the impacts of SONGS on the marine ecosystem for 15 years from 1974-89. Additional SCE studies predated this work beginning in the mid-1960s prior to construction of Units 2/3 and have continued since the MRC was disbanded. Most of the effects predicted by interveners and even some expected by scientists (such as thermal impacts) were not substantiated by these studies, but a few were.

Specifically, the MRC found that SONGS adversely impacted the San Onofre Kelp Bed (SOK), and postulated that the station's entrainment impacts to early and adult life stages of various fishes translated to regional reductions in adult mid-water fish stocks. While SCE disputed the *scope* of the MRC's impact estimates, the Company nevertheless agreed to the CCC's prescribed mitigation, which included construction of an artificial reef to completely offset all estimated

¹ Marine Review Committee. 1989. Final Report of the Marine Review Committee to the California Coastal Commission. August 1989. MRC Report No. 89-02, Technical Reports A-O and Interim Technical Reports 1-5.

² Southern California Edison Company. June 1, 1990 and October 31, 1991. San Onofre Nuclear Generating Station: Compliance with NPDES Permit Conditions.

SOK impacts and restoration of the San Dieguito wetlands to fully compensate for estimated fish losses.

The RWQCB reviewed all of this work during special hearings on October 31, 1991 and concluded on February 10, 1992 that despite the measured or estimated effects of SONGS on the marine environment, there was no clear evidence that Units 2/3 were in violation of either the facility NPDES permits or the state and federal narrative policies or narrative prohibitions contained within. In other words, despite the measured or estimated impacts, SONGS did not adversely affect the beneficial uses of the receiving waters, cause an exceedance of any water quality objective, or otherwise impair the maintenance of balanced, indigenous populations of fish, shellfish and wildlife dependent upon the receiving waters. This conclusion was later reaffirmed by U.S. EPA in their 1994 review³ of SONGS' compliance with Section 316(b) of the Clean Water Act, as well as by the State Water Resources Control Board (SWRCB) in their 1999 concurrence to grant SONGS an exception to the California Thermal Plan⁴.

Second, SDBC states that "it is incumbent on the Tentative Orders to specify the waste discharge requirements and monitoring program" for SONGS. The Tentative Orders are, in fact, the Waste Discharge Requirements prescribed by the Porter-Cologne Water Quality Control Act. Pages 6-16 of the Orders contain both technology- and water quality-based numerical effluent limits for numerous conventional and priority pollutants; even those known to be absent from the SONGS effluent. Pages 17-19 of the Orders contain numerical and narrative water quality limits and prohibitions as prescribed by the California Ocean Plan, Thermal Plan and federal water quality policy and regulations. Attachment D of the Tentative Orders contains 16 pages of in-plant and receiving water monitoring and reporting requirements. Combined with an additional twelve pages of Standard Provisions for Monitoring and Reporting in Attachment C, these elements indeed constitute waste discharge and monitoring requirements for SONGS.

Third, SDBC asserts that the Orders "should be prepared in a clear and concise manner that can be understood by informed public stakeholders." While we agree that clarity and conciseness of the Orders is laudable, we believe that any "informed" public stakeholder would have no difficulty understanding the contents of the Orders as drafted. The Facility and Order Information, Findings and Fact Sheet provide a straightforward and unambiguous description of SONGS operational components, water balance, individual wastewater stream sources and their chemical character, and outfall locations. The Monitoring and Reporting Program similarly identifies the in-plant and offshore locations of monitoring stations, specifies the type and frequency of monitoring required to be performed as well as the format and frequency of reporting results to the RWQCB.

To be sure, the water quality regulation and monitoring of a steam-electric generating station is not a simple matter. One cannot expect the regulatory authorities to distill information to such a

³ U.S. EPA Region IX. 1974. Review of Southern California Edison, San Onofre Nuclear Generating Station (SONGS) 316(b) Demonstration. Final, June 22, 1994.

⁴ California State Water Resources Control Board. 1999. Resolution No. 99-028. Approval of the San Diego Regional Water Quality Control Board's Adoption of an Exception to the California State Thermal Plan for San Onofre Nuclear Generating Station.

simplistic level as to render that information non-substantive. In our opinion, a more simplistic wording of the Order language would be inadvisable, and would likely lead to confusion over interpretation of the permit requirements. We believe that meaningful public participation in permit proceedings requires the public to learn the details of matters that truly concern them. Both the RWQCB and discharger staff are available to assist in this regard.

The comment period provided by the RWQCB is consistent with that provided in similar proceedings and is limited by rules of due process. Nevertheless, any member of the public may begin reviewing the existing NPDES permit, renewal application and monitoring reports from the entire prior permit cycle at least six months in advance of permit expiration by simply requesting a records review at the RWQCB office. For the permits in question, the information has been available for about one year. For those not interested in technical detail, very general information on SONGS is available to the public on the SCE internet website at the following address:

[http://www.sce.com/PowerandEnvironment/PowerGeneration/
SanOnofreNuclearGeneratingStation/](http://www.sce.com/PowerandEnvironment/PowerGeneration/SanOnofreNuclearGeneratingStation/)

I. Compliance with Clean Water Act Section 316(b)

A. SDBC claims that the Orders "fail to demonstrate compliance with [Section] 316(b) (Phase II Rules") of the Clean Water Act. In fact, the Phase II rule specifically requires dischargers, and not the RWQCB or its orders, to first follow several prescriptive steps which, after about 3½ years of advance work will ultimately lead to a new compliance demonstration. SDBC accurately enumerates the rule's compliance steps, but then proclaims that the Orders make no findings that any of the steps have been completed. Consistent with the rule, the RWQCB must first adopt a time schedule for completing these steps, and then the discharger must carry out the work before any of the steps can be completed. SCE has already begun the first step.

Special Provision C. on Pages 21-22 of the tentative Orders spells out these steps and the deadlines for SONGS to submit (1) a Proposal for Information Collection, (2) perform a Comprehensive Demonstration Study including impingement and entrainment monitoring, and (3) to confirm which technologies, operational changes or restoration components may be used to demonstrate compliance with the rule's numerical performance standards. Reporting requirements for these steps are stated in Section XIII.7 on Page D-16 of the Monitoring and Reporting Program. SDBC seems to imply that since these future tasks have yet to be completed, SONGS should be found in non-compliance with the Phase II rule. In accordance with the rule, compliance will be determined by the RWQCB only after the aforementioned prescribed steps have been completed. As for SONGS' present compliance with Section 316(b), that determination can be found in Finding No. 64 on Page 14, and Provision E.18 on Page 43 of existing Order Nos. 99-47 and 99-48, and is based on the same studies referenced in the General Comments section of this letter.

B. SDBC notes that the Orders do not mention any evidence or justification to the assertion that the Orders will assure protection of balanced, indigenous populations of fish, shellfish and wildlife. We agree that a finding could be included to summarize the past monitoring and special studies that have demonstrated continued maintenance of this level of protection. The existing NPDES permits contain numerous historical findings which provide this information. The RWQCB may want to consider summarizing these findings and/or referencing them in the renewed Orders.

C. SDBC notes that the RWQCB has not required in the proposed or prior orders any monitoring of benthic infauna or macrofauna. This is incorrect. Benthic faunal monitoring is part of the quarterly trawling presently performed. Bottom trawls at 60 meters depth are performed at 3 stations as noted on Page D-12 the tentative Orders. In addition, the Kelp Densities study required on Page D-13 includes tri-annual assessment of the composition of the substrate at six SOK fixed stations; and a semi-annual qualitative estimate of the percent sand, cobble, and boulder cover in SOK in a 100 square meter area. Benthic sediment monitoring (i.e., sediment core samples) was performed semi-annually at 5 stations plus 1 one control site from the mid-1970s until being terminated by the RWQCB with the 1994 permit renewals. Analyses of these cores for metals and volatiles demonstrated that the SONGS intakes and discharges did not have any detectable effects on benthic sediment or habitat. The MRC noted that not only did SONGS not adversely affect benthic habitat or organisms, but soft benthos animals appeared to have increased in abundance as a result of SONGS operation⁵.

D. SDBC cites a 1993 draft of EPA's 1994 SONGS 316(b) review (Footnote No. 3) as well as text from the Phase II rule as documentation of SONGS' impact to fishes. In fact, the figures cited on Page 2 of SDBC's letter were not produced by U.S. EPA or their contractors, either in preparing the 1994 316(b) review or in preparing the Phase II rule. Rather, EPA in both cases merely cited the 1989 MRC Final Report (Footnote No. 1). In both documents, EPA references the MRC Report as the source of these figures. The credibility or lack thereof of the MRC's estimates of bight-wide fish losses are a matter of record, as are the RWQCB's response to those estimates⁶ and SCE's acceptance of mitigation obligations⁷.

II. Orders Contain Significant Flaws

A.1. SDBC requests a prohibition on simultaneous chlorination of Unit 2 and 3 condensers, expressing concern that effluent chlorine can be greater as a result. This concern is groundless, since each Unit's cooling water discharge is regulated separately, and each must limit effluent chlorine to specified concentrations. These specified concentrations are water quality-based limits derived from Ocean Plan water quality objectives designed to protect the most sensitive aquatic species with large margins of safety. This protection is verified quarterly by whole effluent chronic toxicity testing of the most sensitive approved test species.

⁵ Marine Review Committee. 1989. Final Report of the Marine Review Committee to the California Coastal Commission. August 1989. MRC Report No. 89-02, Page 2.

⁶ RWQCB. 1999. Order Nos. 99-47 and 99-48. NPDES Permits and Waste Discharge Requirements for San Onofre Nuclear Generating Station Units 2 and 3. Finding No. 57, Page 12.

⁷ California Coastal Commission 1997 Coastal Development Permit No. 6-81-330

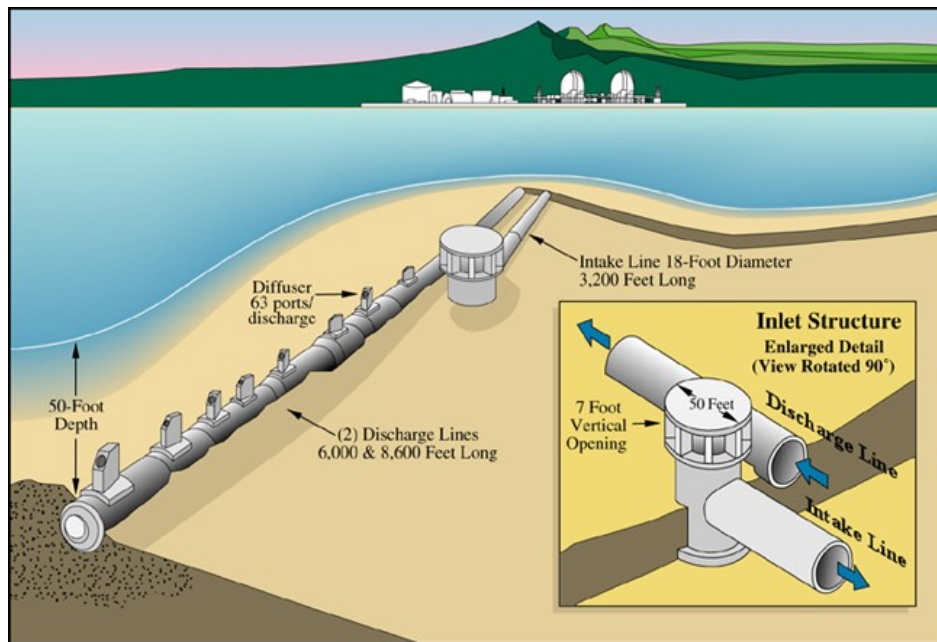
The Ocean Plan objectives for chlorine are unique, in that they account for the non-conservative nature of chlorine in ocean waters (chlorine rapidly dissipates through chemical reactions with seawater). Finally, the design and offset location of the SONGS discharge conduit diffusers ensure that the Zones of Initial Dilution (ZIDs) of each outfall do not overlap or impinge upon one another; that is, initial dilution is completed before the diffuser plumes combine. Therefore, additive effects of the discharges speculated by SBDC do not occur. This fact has been verified not only by comprehensive hydraulic modeling of the discharge plumes⁸, but by quarterly receiving water monitoring for temperature, dissolved oxygen and pH.

A.2. SDBC inquires as to whether intake temperature is higher than natural receiving water temperature, owing to the proximity of the offshore intakes to the discharge diffusers. The answer is simply “no”. The SONGS offshore conduits were specifically designed to prevent warmer effluent from being recirculated into the SONGS intakes in order to maximize the efficiency of the steam condensers. The design also ensures compliance with Thermal Plan receiving water limits. Integral to this design are the 2500 foot-long diffusers themselves, each incorporating 63 separate discharge ports angled upward and offshore to increase effluent discharge velocity and ensure that heated effluent actively travels away from the near shore intakes. An inspection of receiving water temperature data from any of SCE's annual receiving water monitoring reports⁹ demonstrates the effectiveness of the diffuser design. The design of the diffusers and a graphic representation of their effectiveness at discharge temperatures of 20°F and 25°F are shown in the following diagrams, from the FlowScience report referenced in Footnote No. 8.

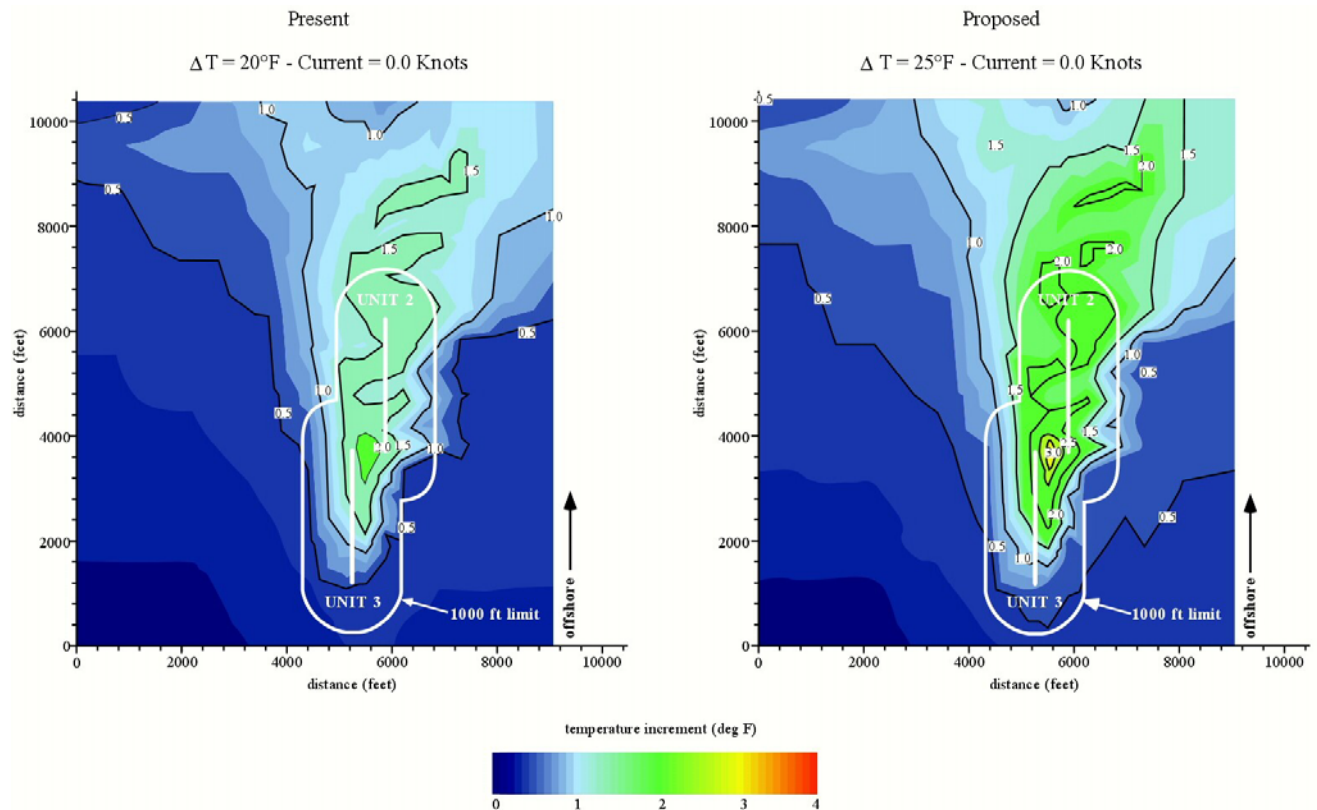
⁸ FlowScience, Inc. 1994. Evaluation of SONGS Units 2 and 3 Ocean Cooling Water System Maximum Temperature Increment. FSI 931EJL. August 10, 1994.

⁹ Southern California Edison. 2003. Marine Environmental Analysis and Interpretation, San Onofre Nuclear Generating Station.

Design of the SONGS Intake and Diffuser System



Thermal Plume from the SONGS Diffusers at 20oF and 25oF Effluent Temperature, No Current (Intakes are located below the bottom of each diagram)



SDBC asserts that "there is a relatively short distance between the intake and the nearest effluent discharge location." Both intakes are located 3,183 feet offshore, while the nearest discharge port of the 2,500 foot-long Unit 3 diffuser is located 3,388 feet offshore, or 205 feet from the intakes. This distance between the intakes and the diffuser lines is irrelevant, because the effluent velocity caused by the diffuser ports induces a current in the offshore direction, carrying effluent away from the intakes and shoreline by design, as shown in the preceding figures. This distance information is clearly provided on Page E-4 of the Tentative Orders.

A.3. SDBC requests additional pollutant effluent limits for concrete cutting water. Limits are unnecessary for this waste stream owing to its infrequency. Alternatively, combined low-volume wastes are subject to the additional limits suggested by SDBC, so the effluent is regulated and monitored for these additional parameters prior to discharge.

A.4. SDBC requests a prohibition on simultaneous heat treatment of the Units 2 and 3 intake conduits, but fails to provide any justification or rationale for this prohibition, or supportive data. SWRCB Resolution 80-95¹⁰ approved heat treatment procedure criteria for Units 2 and 3 following extensive studies by SCE to minimize heat treatment frequency and validate that the procedure did not adversely impact the receiving waters. These criteria do not prohibit simultaneous heat treatment of both Units 2 and 3. Although such a situation would be rare, there is no justification for such a prohibition.

A.5. SDBC inquires as to why the intake temperature is used for determining compliance with the 25°F delta-T requirement. The answer is two-fold. First, natural ocean temperatures in the vicinity of the intake terminal structure constantly vary with time, current direction, depth and proximity to the intake. However, since the intakes draw water inward radially and, to a lesser extent, vertically, the intake combines volumes of water representing all temperature variability in the vicinity of the intake. In other words, the intake design effectively mixes and "averages" the various ocean temperatures in the vicinity of the intake, so the temperature measured in the intake pipe is representative of the range of ocean water temperatures surrounding the intake terminal structure.

Second, the differences in ocean temperatures measured at monitoring stations in the vicinity of the intakes often vary by as much as a few degrees and fluctuate wildly with the vagaries of tides and currents. It would be impossible and scientifically indefensible to choose a particular location and depth near the intake as representing an ideal "natural" temperature, since nature itself exhibits no such uniformity. Alternatively, measuring different temperatures at various locations and depths near the intakes, and then averaging those temperatures, would yield the same result as simply measuring the temperature of the intake water. Therefore, using offshore temperatures to establish the "natural" average ocean temperature is no more valid than measuring intake water as it enters the plant, but requires a significant investment in monitoring equipment and maintenance. SDBC does not accept the intake as representative of the natural

¹⁰ State Water Resources Control Board. 1980. Resolution No. 80-95. Approval of Completed Studies and Proposed Heat Treatment Criteria at San Onofre Nuclear Generating Station Units 2 and 3.

water temperature, but rather erroneously presumes that offshore control monitoring stations are used. This is not the case, nor is there any technical or scientific justification for such a scheme.

A.6. SDBC asserts that the RWQCB should require sediment monitoring; specifically, nutrient parameters. However, SDBC offers no rationale for nutrient monitoring, such as suggesting a potential source of nutrients discharged from a steam-electric power plant. As noted in Comment No. I.C. of this letter, the RWQCB discontinued benthic sediment monitoring in 1994 after exhaustive studies showed no measurable effects from SONGS operation. As SONGS operations have not changed, there would be no justification for reinstituting benthic sediment monitoring.

A.7. SDBC claims that the Orders fail to require marine community monitoring. In fact, the orders require quarterly fish population trawls, kelp density monitoring in the San Onofre Kelp Bed, aerial photographic surveys of the SOK and other kelp beds in the region, and periodic in-plant fish impingement monitoring which has long been considered by resource agencies as one of the more valuable indicators of regional fisheries health. The RWQCB has reduced offshore monitoring gradually over the years, as each year's annual monitoring results repeatedly reaffirmed SONGS' negligible effect on marine communities. Monitoring is appropriate when reasonable potential exists for a discharge to adversely impact a beneficial use or water quality objective. Such is not the case for marine communities in the vicinity of SONGS.

III. Information Gaps, Clarification

A.1. Information on the locations and depths of all intakes and outfalls are provided in the existing SONGS NPDES permits. For your convenience, that information is summarized below;

Element	Location (Lat/Long)	Depth
Unit 1 Intake	33° 21' 43" / 117° 33' 50"	30'
Unit 1 Discharge	33° 21' 49" / 117° 33' 45"	30'
Unit 2 Intake	33° 21' 39" / 117° 33' 44"	32'
Unit 2 Diffuser	33° 20' 55.84" / 117° 34' 13.5"	39'-49'
Unit 3 Intake	33° 21' 36" / 117° 33' 38"	32'
Unit 3 Diffuser	33° 21' 11.74" / 117° 33' 51.61"	32'-38'
Fish Return System Discharge	33° 21' 55" / 117° 33' 28"	20'
Across the Beach Discharge	33° 22' 04" / 117° 33' 20"	MHHW

Structural details of the conduits will be provided if requested by the RWQCB. However, for security reasons we prefer to not distribute this information.

A.2. "Non-radioactive" plant drains refer to drains from systems that do not normally contain radioactivity, but on occasion may contain trace amounts. Non-radioactive plant drains are routed through a radiation monitor. Radioactive plant drains are routed to the radwaste processing system where the water is purified and radioactivity removed through filters and ion

exchangers. The purified water is sampled and analyzed for radioactivity prior to release through an additional radiation monitor. All radioactivity sampling, reporting, and regulatory oversight fall under the jurisdiction of the Nuclear Regulatory Commission in accordance with the federal Atomic Energy Act.

A.3. The thermophilic digester was proposed during the 1990s but is no longer contemplated. References to this installation should be deleted.

A.4. Concrete cutting includes domestic water used for cooling water for concrete cutting saws that will be used primarily during the San Onofre Steam Generator Replacement Project in 2009 and 2010. This discharge will likely not occur before the year 2009. During the steam generator replacement project, this wastewater will be released during each year for approximately three months duration. The effluent from this low volume waste stream will be treated as needed to meet low volume waste and combined discharge effluent limitations as specified in the Orders.

A.5. SDBC hypothesizes that chronic toxicity measured in the intake on 11/24/03 could have originated from the discharge and been drawn back into the intake. This is not possible given the hydraulic characteristics of the discharge, as explained in Comment No. II.A.2. in this letter. Furthermore, had the toxicity originated from the discharge, a ten-fold reduction of this toxicity would occur within the ZID via the 10:1 dilution effects of the discharge diffusers. However, the intake toxicity measured on this date was equivalent to the discharge toxicity, and therefore could not possibly have originated from the discharge.

A.6. See Comment No. III.A.3. above.

A.7. The Zone of Initial Dilution (ZID) and Dilution Factor (DM) were determined by experts from the California Institute of Technology in 1974¹¹, verified by the MRC and accepted by the State Water Resources Control Board on March 13, 1980. The ZID for each diffuser does not overlap with the other. In fact, the dilution efficiency of the diffuser ports is so high, initial dilution of effluent is achieved within about 60 feet to either side of each diffuser, themselves separated by several hundred feet. Therefore, there is no basis for a combined ZID or for additive effects from the discharges.

A.8. Quarterly chronic toxicity monitoring is justified by the fact that SONGS has rarely ever exceeded its chronic toxicity whole effluent limit. The Ocean Plan allows a RWQCB to reduce or eliminate certain monitoring if the discharge history shows little or no potential for exceedance of an effluent limit. The daily maximum limit, which is applied to a 24-hour composite sample, is the customary monitoring unit for chronic toxicity regardless of the

¹¹ R.C.Y. Koh, N.H. Brooks, E.J. List and E.J. Wolanski. 1974. Hydraulic Modeling of Thermal Outfall Diffusers for the San Onofre Nuclear Power Plant W.M. Keck Laboratory of Hydraulics and Water Resources, California Institute of Technology Report No. KH-R-30, January, 1974. and List, E.J. and R.C.Y. Koh. 1974. Interpretation of Results from Hydraulic Modeling of Thermal Outfall Diffusers for the San Onofre Nuclear Power Plant W.M. Keck Laboratory of Hydraulics and Water Resources, California Institute of Technology Report No. KH-R-30, November, 1974

required monitoring frequency. In addition, the tentative Orders propose a doubling of the frequency of chronic toxicity monitoring compared to the existing NPDES permits.

IV. Sufficiency of Monitoring

A.1. The Proposal for Information Collection (PIC) is currently under development and will be submitted to the RWQCB and other resource agencies for review as prescribed in the permit. It will comply with requirements for the PIC as specified on Page 21 of the Tentative Order, which reflect the Phase II rule requirements.

A.2. Fish population monitoring near SONGS and near unaffected control stations adequately characterizes fish populations via abundance and richness measurements. A twenty year record of this monitoring can be found in the annual receiving water monitoring reports⁹. This monitoring has never detected statistically significant differences in fish densities near SONGS compared to control sites. Figure 2 of Appendix D of the tentative Orders clearly shows that otter trawl stations near SONGS are all within 3 km of the intakes/discharges, while control stations are far north and south from the plant's influence.

The additional intake monitoring proposed by SDBC is unwarranted, although marine mammal entrainment monitoring is separately required by the National Marine Fisheries Service and is reported to that agency. Benthic organisms are not entrained/impinged due to the intake terminal structure's velocity cap and its placement substantially above the seafloor. Waterfowl is not entrained/impinged due to the velocity cap and its placement well below the low tide elevation. Entrained fish larvae are not impinged because they pass through the intake screens and therefore cannot be sampled (although special sampling equipment will be employed during the limited Comprehensive Demonstration Study required by the 316(b) Phase II rule).

The fish return outfall sampling proposed by SDBC cannot be performed quantitatively without killing the fish that would otherwise be returned to the ocean alive. Data on fish return system efficiency was previously obtained. During 1985-86, a "corral" net was deployed at the end of the Fish Return System outfall and monitored by divers to document the survival of fish returned to the ocean. A total of fourteen 96-hour samples were collected (six from Unit 2 and eight from Unit 3). The results are documented in the National Marine Fisheries Service reference footnoted below¹². In addition to the offshore fish return studies, annual in plant fish return efficiency studies were performed weekly between 1984 and 1994 and again in 1999. The data from these studies is detailed in past annual receiving water monitoring reports. Presently, fish impingement and fish return efficiency is also quantitatively monitored during each heat treatment; approximately every six weeks (see Page D-5 of the tentative Orders).

B.1. SDBC repeats their prior comment here regarding sediment monitoring, which we have addressed in Comment No. II.A.6. above.

¹² NOAA Technical Report NMFS 76: Analysis of Fish Diversion Efficiency and Survivorship in the Fish Return System at San Onofre Nuclear Generating Station

C.1. We agree the legibility of monitoring location maps could be improved in the Order.

C.2. See comment for C.1. above.

C.3. We agree with the comment regarding map legibility. However, we disagree that this information is critical to determine compliance with Thermal Plan objectives. Thermal Plan compliance has been repeatedly demonstrated by a wide margin every year since SONGS 2/3 operations commenced. The MRC established during its earliest studies that thermal effects from SONGS 2/3 were inconsequential owing to the superior performance of the diffusers⁵. Compliance with Thermal Plan receiving water criteria¹³ is demonstrated each year through NPDES-required temperature surveys in the receiving water⁹, and most recently was affirmed by the SWRCB through their concurrence with the RWQCB's adoption of a Thermal Plan exception⁴. In fact, studies performed to support the exception showed that even under worst-case scenario conditions (effluent delta-T at the 25°F exception limit and no current in the receiving waters), SONGS meets all three Thermal Plan receiving water criteria by a wide margin. Furthermore, SONGS attains the Thermal Plan's 4°F restriction on surface temperature increase everywhere in the vicinity of the discharge, not just beyond 1000 feet from the discharge as required. This is due to the exceptional performance of the diffuser design, and is depicted in the figures on Page 6 of this letter.

SDBC's suggestion that insufficient numbers of temperature monitoring stations are employed beyond the Thermal Plan's 1000 foot boundary simply ignores the facts, and is irrelevant in any case. Figure 4 of Appendix D of the tentative Order clearly shows eighteen (18) temperature monitoring stations in the vicinity of the diffusers but beyond the 1000-foot distance. By design, fewer monitoring stations are located landward of the outfalls due to the offshore current induced by the diffusers (see Comment No. II.A.2. above). As noted in the previous paragraph, twenty years of monitoring and sophisticated modeling show that SONGS meets Thermal Plan limits even within the 1000-foot boundary. Therefore, one could argue that monitoring beyond that distance ought to be relaxed, not amplified. The fact is receiving water temperature monitoring at SONGS no longer serves any Thermal Plan compliance purpose. As long as the 25°F delta-T limit is met in-plant, the receiving water temperature limits will all be met as well.

V. Separation of Orders

While we also agree that the outfalls for Units 1, 2 and 3 should be combined into a single NPDES permit for purposes of regulatory fairness, we disagree with SDBC's assertion that printing the Order information on separate pieces of paper somehow increases the difficulty of evaluating the cumulative impacts of both Units on water quality. The impacts of SONGS are not published in the Orders, but rather in the comprehensive annual receiving water monitoring reports submitted each year as required in Section XIII.7 on Page D-16 of the tentative Orders. Inspection of any one of the twenty annual receiving water monitoring reports produced since 1984 would show that all receiving water monitoring, data analyses and evaluation for Units 2

¹³ State Water Resources Control Board 1975 Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California

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and 3 are combined. The offshore effects of the station have always been evaluated as if from a single source. This could be construed as additional justification for combining the two Orders into one.

Conclusion

SCE objects to further extending the review and comment period for the tentative Orders. The RWQCB has already extended the comment period 5 weeks beyond the statutory requirement. Although plant operations will not be impaired by a delay in permit renewal, we believe the RWQCB has already granted adequate time for public comment. We are certain an extension will yield no new or relevant information regarding SONGS' operations or impacts. Accordingly, the tentative Orders differ very little from the existing NPDES permits.

Monitoring and participating meaningfully in the SONGS NPDES permit renewal process requires some advance planning. It is common knowledge that NPDES permits expire every 5 years, and that applications for renewal must be filed 6 months in advance. SDBC could have reviewed the existing Orders, recent monitoring reports and renewal applications at that time. SCE is willing to provide non-confidential documentation requested by the public and even have our technical experts spend time explaining the complexities of SONGS' water quality control history to those interested in listening. Unfortunately, we are rarely asked to do so, by SDBC or any of its affiliate groups.

Please feel free to contact me at (626) 302-2149, or Mr. Robert Heckler at (949) 368-6816 if you should have any questions.

Sincerely,

DAVID W. KAY, D. Env.

Manager of Environmental Projects

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